BIBLIOMETRICS: developing a publications analysis tool

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Francesc March Mir
BIBLIOMETRICS: developing a publications analysis tool

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1. Context
Virtual Library

Area of Academic Services and Library
Director

Director’s Assistants
3 people

Library Services for Learning
Dir. Cristina López
9 people

Library Services for Research
Dir. Clara Riera
10 people

External team for basic library services
6 people
Library Services for Research

- Bibliographic services
- Bibliometric services
- Standardization of author’s names
- Support service for accreditation calls
- Open-access publication of Doctoral Theses

- CRIS data validation
- Predoctoral fellow training
- Editorial policies and Open Access
- UOC’s academic journals management
Bibliometric services

- Evaluation of scientific publications, at individual, research group, department, knowledge area or institutional level.
- Procedures of application calls for the Teaching Staff
- Calls for project proposals (publications of the IP)
- Dissemination of the scientific publications (strategic)
- External reports

Service users
UOC Research Areas

Focus on:
- Education and ICT (e-learning)
- Information and Knowledge Society

- Social Sciences: 64%
- Arts and Humanities: 15%
- Information and Communication Technology: 18%
- Health Science: 3%

- 44 Research Groups
- 2 Research Centers
- 256 Teaching & Research Academic staff

Data 21/10/2015
# Bibliometric indicators by areas

<table>
<thead>
<tr>
<th>ACADEMIC DISCIPLINE</th>
<th>FIELD OF STUDY</th>
<th>BIBLIOMETRIC INDEXES</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUMANITIES</td>
<td>LANGUAGE AND LITERATURE</td>
<td><a href="https://www.webofknowledge.com">SI Web of Knowledge</a></td>
</tr>
<tr>
<td></td>
<td>HUMANITIES</td>
<td><a href="https://miar.com">MIAR</a></td>
</tr>
<tr>
<td></td>
<td>HISTORY AND ART</td>
<td><a href="https://dicesciencia.com">DICE</a></td>
</tr>
<tr>
<td>SOCIAL SCIENCES</td>
<td>COMMUNICATION AND INFORMATION SCIENCES</td>
<td><a href="https://latindex.com">Latindex</a></td>
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<td>LAW</td>
<td><a href="https://www.fecyt.es">FECYT</a></td>
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<tr>
<td></td>
<td>ECONOMICS AND BUSINESS STUDIES</td>
<td><a href="https://resh.com">resh</a></td>
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<tr>
<td></td>
<td>EDUCATION</td>
<td><a href="https://in-reci.com">IN-RECI</a></td>
</tr>
<tr>
<td></td>
<td>SOCIOLOGY AND POLITICAL SCIENCE</td>
<td><a href="https://in-recs.com">IN-RECS</a></td>
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<tr>
<td></td>
<td>PSYCHOLOGY</td>
<td></td>
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<tr>
<td>HEALTH SCIENCES</td>
<td></td>
<td></td>
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<tr>
<td>ENGINEERING &amp; ARCHITECTURE</td>
<td>INFORMATION AND COMMUNICATION TECHNOLOGIES</td>
<td><a href="https://www.webofknowledge.com">SI Web of Knowledge</a></td>
</tr>
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Bibliometric information sources

EDICIÓ 2014

<table>
<thead>
<tr>
<th>ISSN</th>
<th>TÍTOL</th>
<th>VALORIÇI</th>
<th>AMBIT</th>
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<tbody>
<tr>
<td>0148-2076</td>
<td>19TH CENTURY MUSIC</td>
<td>A</td>
<td>ARTS</td>
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<tr>
<td>0743-4618</td>
<td>AAC: AUGMENTATIVE &amp; ALTERNATIVE</td>
<td>A</td>
<td>COMUNICACIÓ</td>
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<tr>
<td>1941-6520</td>
<td>ACADEMY OF MANAGEMENT ANNALS</td>
<td>A</td>
<td>ECONOMIA</td>
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<tr>
<td>0001-4273</td>
<td>ACADEMY OF MANAGEMENT JOURNAL</td>
<td>A</td>
<td>ECONOMIA</td>
</tr>
<tr>
<td>1537-260X</td>
<td>ACADEMY OF MANAGEMENT LEARNING &amp; EDUCATION</td>
<td>A</td>
<td>EDUCAÇIÓ</td>
</tr>
</tbody>
</table>

The European Science Foundation (CSF) signed in January 2014 a memorandum of understanding with the Norwegian Social Science Data Services (NSD) to transfer the maintenance and operations of the European Reference Index for the Humanities (ERIH) to NSD. The ERIH database operated by NSD is called ERIH PLUS.
Increase Bibliometric services

<table>
<thead>
<tr>
<th>Year</th>
<th>Queries</th>
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<tbody>
<tr>
<td>2010-2011</td>
<td>37</td>
</tr>
<tr>
<td>2011-2012</td>
<td>100</td>
</tr>
<tr>
<td>2012-2013</td>
<td>132</td>
</tr>
<tr>
<td>2013-2014</td>
<td>145</td>
</tr>
</tbody>
</table>

Data 21/10/2015
2. BIBLIOMETRICS
BIBLIOMETRICS: what is it?

- An in-house database
- Allows users to search and manage bibliometric data
- It stores the UOC's academic articles and lets users assess their quality based on national and international bibliometric indicators
- Responds to the bibliometric needs both of the faculty and researchers
- Restricted access for UOC community
- Types of documents: original, review, proceedings paper, editorial material, book review, letter.
BIBLIOMETRICS: what does it offer?

- Bibliographic and bibliometric information and normalized data
- Comparative bibliometric analysis of the UOC’s researchers, research group, research centers and departments
- Data extraction in different formats for exporting (graphical, CSV, etc.)
- Graphical representation of data
- Four levels of indicators:
  1. Productivity
  2. Visibility
  3. Impact
  4. Collaboration
BIBLIOMETRICS: indicators

Productivity: number of publications by author, year of publication and type of publication, and the average number of publications by author, research group, research centre or department at the UOC.

![Comparative publications by year](chart.png)
BIBLIOMETRICS: indicators

Visibility: analysis of the quality of articles in terms of the journal they are published in using international and/or national bibliometric indicators.
BIBLIOMETRICS: indicators

**Impact:** analysis of the citations received by publication in ISI WoS, Scopus and Google Scholar databases.
BIBLIOMETRICS: indicators

Collaboration: analysis of the level of co-authoring publications in terms of authors’ affiliation.
BIBLIOMETRICS: faceted search

Filter
- UOC department
- Research center
- Research group
- Academic discipline
- Field of study
- Author
- Publication type
- Author profile
- Peer review
- Open access
- Indexed
- Publication year
- Date range

Research center
- eLC - eLearn Center (108)
- IN3 - Internet Interdisciplinary Institute (591)

Academic discipline
- Engineering And Architecture (276)
- Humanities (163)
- Medicine And Health Sciences (42)
- Science (9)
- Social Sciences (759)

Publication type
- Abstract (1)
- Book review (6)
- Editorial material (19)
- Letter (7)
- Note (2)
- Original (1273)
- Proceeding paper (68)
- Review (50)
- Working paper (7)

Date range
From:  
To:
**BIBLIOMETRICS: sources of bibliographic data**

The bibliographic data used by Bibliometrics come from:

- CRIS (Current Research Information System)
- ISI Web of Knowledge
- Scopus

Bibliographic information for each publication:

- Authors
- Affiliation
- Type of publication
- Knowledge field
- Year of publication
- Peer review
- Open access
- Journal indexed or not
BIBLIOMETRICS: sources of bibliometric data

International
- JCR
- SJR
- Latindex
- ERIH +

National
- CARHUS+
- MIAR
- DICE

Citations
- ISI WoK
- SCOPUS
- Google Scholar
Technology

- MySQL
- JAVA
- JAVA development framework

Charting library

- Highcharts

Data 21/10/2015
3. Future goals
## Future goals

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<tr>
<th></th>
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<tbody>
<tr>
<td>Manual loading data</td>
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</tr>
<tr>
<td>Data validation</td>
<td></td>
<td></td>
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<tr>
<td>Internal presentation to VR</td>
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<tr>
<td>Presentation of the Bibliometrics to the researchers</td>
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<tr>
<td>Automatic connexion between CRIS and Bibliometrics</td>
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<tr>
<td>Improve the connexion between Scopus and ISI WoK</td>
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</tr>
</tbody>
</table>
Thank you!

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